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09/877,577	06/07/2001	Douglas I. Lovison	11321.1	1675

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EXAMINER

HWANG, VICTOR KENNY

ART UNIT	PAPER NUMBER
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3764

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/877,577

Applicant(s)

LOVISON, DOUGLAS I.

Examiner

Victor K. Hwang

Art Unit

3764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 2 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION*****Specification***

1. The disclosure is objected to because of the following informalities: on page 5, lines 26-28, the coefficient of rolling friction between the rim of the wheels and the surface 36 is indicated as having a value approximately less than one inch. This description is not understood since the Examiner believes that a coefficient of rolling friction, as typically defined, is a unit-less value. Additionally, applicant indicates that this coefficient is approximately less than one inch and provides for the possibility that the wheel rim is made of a neoprene material, but gives no indication of the material of the surface upon which the neoprene wheel rolls to provide a coefficient of approximately less than one inch. A coefficient of rolling friction is an indication of the relationship between two materials. One material being the wheel construction and the other material being the surface construction. Clarification of applicant's use of a coefficient of rolling friction having a unit of inches is requested.

Appropriate correction is required.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the crossbar formed with a bow at the center bent at an approximately 45 degree angle must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because the specification describes the bow 30 bent at an approximately 45 degree angle (page 5, lines 13-14), but Fig. 2 shows the bow 30 bent at an approximately 110 degree angle (the angle between the two grips 31a and 31b). It is not clear whether applicant intended the 45 degree angle to refer to the angle between the grips 31a and 31b and the axis 18 of crossbar 16. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### *Claim Objections*

4. Claim 2 is objected to because of the following informalities: the coefficient of rolling friction being less than one inch is not understood since coefficients of rolling friction, as normally defined, are unit-less values. See the preceding discussion on rolling friction. Appropriate correction is required.

5. Claim 8 is objected to because of the following informalities: the recitation "said device" on line 24 lacks proper antecedent basis and presumably refers to the at least one hand grip. Appropriate correction is required.

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***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5-9 and 11-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over *Bold, Jr.* (US Pat. 4,900,017). *Bold, Jr. '017* discloses a hand grip interactive with a surface, the hand grip 20 comprising a crossbar 26 defining an axis and having first and second ends; and first and second wheels 24, each having a rounded rim 44 made of neoprene (col. 10, lines 27-31) and being selectively mounted at respective first and second ends of the crossbar. The first and second wheels rotate independently of each other about the axis and are mounted to the crossbar by cylindrical bearing sleeves 46 so that the wheel is free to rotate about the crossbar axis (col. 10, lines 32-39). The neoprene rims 44 are a frictional periphery that enables the device to be easily translated across a surface. A user may perform exercises in at least sitting, standing, or kneeling positions (col. 13, lines 53-58). A sitting position would necessitate the user being a bend-at-the-waist position. Each wheel may be quickly connected or disconnected from the crossbar by unthreading inertial mass 28 or retaining member 69.

*Bold, Jr. '017* does not discuss the axle friction generated between each wheel and the crossbar being less than the rolling friction generated between the surface and the rim of each respective wheel. *Bold, Jr. '017* discloses that the wheels 24 are mounted on bearing surfaces 46,48 to the crossbar 26 for free rotation and that the rim 44 comprises neoprene rubber or the

like for engaging a ground surface as the device is rolled across the surface. Inherently, there is axle friction and rolling friction associated with the device disclosed by *Bold, Jr. '017*. It is clear that the bearing surfaces 46,48 are intended to minimize the axle friction between the wheels and the crossbar to permit free rotation of the wheels relative to the crossbar.

Neoprene is disclosed by the Applicant in the instant application as a material to be used that permits Applicant's invention to have an axle friction less than the rolling friction and a coefficient of rolling friction less than one inch. Since the device of *Bold, Jr. '017* uses the same material in essentially the same manner, the rolling friction for the *Bold, Jr. '017* device would inherently have or be obvious to one having ordinary skill in the art to be greater than the axle friction and have a coefficient of rolling friction less than one inch.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3 and 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bold, Jr.* (US Pat. 4,900,017) in view of *Ilic* (US Pat. 6,602,170 B2). *Bold, Jr. '017* has been discussed above, and such discussion is incorporated herein. *Bold, Jr. '017* discloses the invention as claimed except for the step of rolling the device is accomplished by moving the device in a curving path radially from the longitudinal axis on the surface (claim 10).

*Ilic* discloses analogous exercise device wherein a user may be positioned in a kneeling or sitting position while grasping hand grips 14 and rolling handgrips 14 along a ground surface. The pair of handgrips can be rolled along the ground in generally parallel paths or in curved paths. It would have been obvious to one having ordinary skill in the art at the time the invention was made to roll the device of *Bold, Jr. '017* in the curving path of *Ilic*, in order to exercise additional muscles of the user's torso.

10. Claims 1 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Brockett et al.* (US Pat. D287,526) in view of *Schnell* (US Pat. 4,455,020), *Frasco et al.* (US Pat. 6,436,015 B1) and *Anastasi* (US Pat. 5,741,206). *Brockett et al.* discloses an exercise device comprising a crossbar having first and second ends, with plates/wheels with rounded rims positioned at each end. The crossbar had a center with a bow so that grips are angled for reduced stress on a user's wrist, as is well known in the exercise art. The bow may be considered to be bent at an approximately 45 degree angle as best understood from applicant's disclosure. A collar at each end of the crossbar allows for quick disconnection and connection of each plate from a respective end of the crossbar.

*Brockett et al.* does not disclose the axle friction generated between each plate/wheel and the crossbar being less than the rolling friction generated between the rim of each respective wheel moving over a surface (claim 1); and a bearing means attached between a hub of each plate and crossbar for reducing the axle friction force therebetween.

*Schnell* discloses a sleeves 4 for supporting exercise plates on the ends of a bar 2. The sleeves may include needle bearings 29 between the bar 2 and the bearing sleeve 13. The

bearings enable free rotation of the sleeves without wear of the sleeve or of the bar. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the crossbar ends of *Brockett et al.* with the bearing sleeves of *Schnell*, in order to provide free rotation of the sleeve without wear of the sleeve or of the bar (col. 2, lines 22-24). Free rotation of the sleeves enable the bar to freely rotate to a desired user's hand position, further reducing stress to the user's wrists.

*Frasco et al.* discloses a exercise plate having at least one elongate opening for grasping by a user and a center aperture for receiving the end of an exercise bar. The plate may be coated with a protective coating such as urethane, rubber, plastic or a composite material. The elongate openings provide easy handling of the plates. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the exercise bar of *Brockett et al.* as modified by *Schnell* with the plates of *Frasco et al.* having elongate apertures and protective coating, in order to provide plates easy to handle and grasp.

*Anastasi* discloses an exercise plate having elongate openings for grasping by a user and a center aperture for receiving the end of an exercise bar. The plate is covered for added comfort when gripping the weight. The covering may comprise a neoprene coating (col. 3, lines 10-12). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the exercise device of *Brockett et al.* as modified by *Schnell* and *Frasco et al.* with the neoprene coating of *Anastasi*, in order to provide the exercise plate with a comfortable grasping surface, since the plates of *Frasco et al.* also have elongate apertures for grasping. The neoprene coated rim of the plates would have an equivalent rolling friction



as applicant's neoprene rim and would cause the rolling friction of the device to be greater than the axle friction. just as applicant's invention.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

*Jones et al.* (US Pat. D243,013) and *Lauschke* (DT 2,035,895) disclose devices comprising a crossbar with wheels at the ends having rounded rims.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor K. Hwang whose telephone number is (703) 308-2865. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM Eastern time. The facsimile number for submitting papers directly to the examiner for informal correspondence is (703) 746-4891. The facsimile number for submitting Official papers to Technology Center 3700 is (703) 872-9302 and for submitting papers After Final to Technology Center 3700 is (703) 872-9303.

Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 3700 receptionist at (703) 308-0858.



**NICHOLAS D. LUCCHESI  
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**Victor K. Hwang  
September 17, 2003**